

What is claimed is:

1. An image pick-up method for picking up an image of an object with a camera mounted via a pan head on a moving pedestal, comprising the steps of:

5 setting a reference position on a floor surface on which the moving pedestal moves, and a reference angle of the moving pedestal;

detecting a moving amount of the moving pedestal from said reference position and a rotation angle 10 thereof from said reference angle;

finding a position and an angle of the camera with respect to the object on the basis of said reference position, said reference angle, said moving amount and said rotation angle of the moving pedestal; and

15 transmitting data of the position and the angle of the camera with respect to the object, to a computer for creating an image containing a real object image of the object taken with the camera.

20 2. The method according to claim 1, wherein said moving amount of the moving pedestal is obtained by measuring a length of a portion of a wheel of the moving pedestal, which has been brought into contact with the floor surface.

25 3. The method according to claim 1, wherein the moving pedestal includes at least three wheels, and said rotation angle is calculated from moving distances of two wheels which are distant in terms of a moving

direction.

4. The method according to claim 3, said two wheels are selected which are most distant.

5. The method according to claim 1, wherein first and second lines are formed on the floor surface so that they normally cross with each other from said reference position, and two first sensors for detecting the first line and one second sensor for detecting the second line are provided on the moving pedestal, and said reference position and said reference angle are found on the basis of said moving amount at a time when the two first sensors each pass said first line, and said moving amount at a time when said second sensor passes the second line.

10 6. An image pick-up system for picking up an image of an object, comprising:

a camera unit having a structure in which a camera for picking up an image of an object, is mounted via a pan head on a moving pedestal;

20 an operation means for calculating a positional relationship between the camera and the object;

a setting means for setting a reference position on a floor surface on which the moving pedestal moves, and a reference angle of the moving pedestal to said 25 operation means; and

a detection means for detecting a moving amount of the moving pedestal from the reference position, and a

rotation angle thereof from the reference angle;

wherein said operation means calculates out a position and an angle of the camera with respect to the object on the basis of the reference position, the

5 reference angle, the moving amount and the rotation angle of the moving pedestal, and transmits data of the position and the angle of the camera with respect to the object, to a computer for creating an image containing a real object image of the object taken with

the camera.

10 7. The system according to claim 6, wherein said setting means includes a reference detection mechanism for detecting the reference position on the floor surface on which the moving pedestal moves, and the reference angle of the moving pedestal.

15 8. The system according to claim 6, wherein said detection means detects the moving amount of the moving pedestal by measuring a length of a portion of a wheel of the moving pedestal, which has been brought into contact with the floor surface.

20 9. The system according to claim 6, wherein the moving pedestal has at least three wheels and said detection means includes at least three encoders each for finding a moving distance of a respective wheel in the movement of the moving pedestal.

25 10. The system according to claim 9, wherein the rotation angle is calculated from the moving distance

found by the encoders provided two of the wheels, which are distant with respect to the moving direction.

11. The system according to claim 10, said two wheels are selected which are most distant.

5        12. The system according to claim 9, wherein rollers are provided as being brought into contact with the wheels, respectively, to be rotated along with the rotation of the wheels, and the moving distance of each of the wheels is found from the number of rotation of  
10        the respective roller and a pulse number counted by said respective encoder.

13. An image pick-up system for picking up an image of an object, comprising:

15        a moving pedestal including three wheels;  
a camera unit having a structure in which a camera for picking up an image of an object, is mounted via a pan head on said moving pedestal;

an operation means for calculating a positional relationship between the camera and the object;

20        three encoders provided respectively for said three wheels of said moving pedestal;

      a plurality of sensors provided on said moving pedestal, for detecting a predetermined mark made on a floor surface on which said moving pedestal moves; and

25        a setting means for setting a reference position on the floor surface, and a reference angle of said moving pedestal, which are found from detection values

of said plurality of sensors and a pulse numbers counted by said encoders in the movement of said moving pedestal, to said operation means;

5       wherein said operation means calculates out a position and an angle of the camera with respect to the object on the basis of the reference position, the reference angle, the moving amount and the rotation angle of said moving pedestal, which are obtained from the pulse numbers counted by said encoders, and  
10      transmits data of the position and the angle of the camera with respect to the object, to a computer for creating an image containing a real object image of the object taken with the camera.

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